

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 (Currently amended). A method for attenuating the virulence of a bacterial pathogen Staphylococcus aureus or for inhibiting or reducing colonization by a bacterial pathogen Staphylococcus aureus in a patient in need thereof, comprising administering to the patient in need an effective amount of c-di-GMP to attenuate the virulence of, or to inhibit or reduce colonization by, the bacterial pathogen, wherein the bacterial pathogen is selected from the group consisting of Staphylococcus aureus, Klebsiella pneumoniae, and Streptococcus pneumoniae S. aureus.

2 (Currently amended). The method of claim 1, wherein the attenuation of the virulence of a bacterial pathogen S. aureus comprises treating a S. aureus bacterial infection.

Claim 3 (Cancelled).

4 (Currently amended). The method of claim 2, wherein said S. aureus bacterial infection is mastitis, S. aureus a Staphylococcus aureus infection of the mammary gland.

5 (Currently amended). The method of claim 2, wherein said S. aureus bacterial infection is treated by inhibiting S. aureus.

s. aureus bacterial biofilm formation or by reducing the *s. aureus* bacterial biofilm already formed.

Claims 6-9 (Cancelled).

10 (Currently amended). The method of claim 5, wherein said *s. aureus* bacterial biofilm is on the skin or on a nasal or mucosal surface.

11 (Currently amended). The method of claim 2, further comprising administering an antibiotic compound which is effective in treating said *s. aureus* bacterial infection.

Claim 12 (Cancelled).

13 (Currently amended). The method of claim 1, wherein the inhibition or reduction of colonization of a bacterial pathogen *s. aureus* comprises treating a patient at risk of being colonized by a *s. aureus* the bacterial pathogen or a patient already colonized by *s. aureus* the bacterial pathogen.

14 (Currently amended). The method of claim 13, wherein the colonization of *s. aureus* the bacterial pathogen that is inhibited or reduced is on the skin or on a nasal or mucosal surface.

Claim 15 (Cancelled).

16 (Original). The method of claim 13, wherein said patient is a carrier of *Staphylococcus aureus*.

17 (Currently amended). A method for inhibiting *Staphylococcus aureus* bacterial colonization and biofilm

formation or for reducing bacterial colonization and pre-formed Staphylococcus aureus biofilm on a solid surface, comprising exposing the solid surface to an effective amount of c-di-GMP to inhibit S. aureus bacterial colonization and biofilm formation or to reduce S. aureus bacterial colonization and pre-formed biofilm on said solid surface, wherein the bacterial colonization and biofilm is formed by a bacterial pathogen selected from the group consisting of Staphylococcus aureus, Pseudomonas aeruginosa, and Vibrio parahaemolyticus.

18 (Original). The method of claim 17, wherein said solid surface is a solid surface of a medical device.

19 (Original). The method of claim 18, wherein said medical device is implantable in or capable of attaching to a patient.

20 (Original). The method of claim 18, wherein said medical device is implanted in a patient or otherwise in contact with a patient.

Claims 21-27 (Cancelled).

28 (Previously presented). The method of claim 1, wherein said patient in need thereof is a mammal.

29 (Previously presented). The method of claim 1, wherein said patient in need thereof is human.

30 (Previously presented). The method of claim 1, wherein said patient in need thereof is a bird.

31 (New) . The method of claim 2, wherein said bacterial infection is a *Staphylococcus aureus* infection.

32 (New) . The method of claim 5, wherein said bacterial biofilm is a *Staphylococcus aureus* biofilm.

33 (New) . The method of claim 13, wherein said bacterial pathogen is *Staphylococcus aureus*.

34 (New) . The method of claim 1, wherein said bacterial pathogen is *Staphylococcus aureus*.

35 (New) . The method of claim 1, wherein said bacterial pathogen is *Klebsiella pneumoniae*.

36 (New) . The method of claim 1, wherein said bacterial pathogen is *Streptococcus pneumoniae*.

37 (New) . The method of claim 10, wherein said bacterial biofilm is a *Staphylococcus aureus* biofilm.

38 (New) . The method of claim 17, wherein the bacterial colonization and biofilm is *Staphylococcus aureus* colonization and biofilm.

39 (New) . The method of claim 17, wherein the bacterial colonization and biofilm is *Pseudomonas aeruginosa* colonization and biofilm.

40 (New) . The method of claim 17, wherein the bacterial colonization and biofilm is *Vibrio parahaemolyticus* colonization and biofilm.